

Exhibit E

Appl. No. 90/011,233

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : John B. ADRAIN
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Ex Partes Reexamination
Commissioner for Patents
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RESPONSE TO NON-FINAL OFFICE ACTION in EX PARTES
REEXAMINATION OF U.S.Pat. No. 5,831,669

AMENDMENT "A"

Sir:

This amendment is filed in response to the Office action dated June 3, 2011. The two month period for responding to the Office action expires on August 3, 2011. Please amend the above-identified application in the following manner

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Status of Claims and Support for Claim Changes begin on page 12 of this paper.

List of Prior or Concurrent Proceedings are on page 15 of this paper.

Remarks/Arguments begin on page 16 of this paper.

Appl. No. 90/011,233

Claims

Please amend the claims as provided below, according to Rule 530.

1. (amended) A monitoring system comprising:

a movably mounted digital camera adapted for receiving images of a space to be monitored for outputting digital image data;

an interpreter for receiving said digital image data from the digital camera;

a reference memory for storing reference image data;

a comparator connected for comparing image data from the interpreter to image data from the reference memory according to selected comparison criteria, wherein the interpreter and comparator cooperate to select recognizable portions of image data among unrecognized portions of image data in the space being monitored, the selected image portions being compared to the image data in the reference memory; and

an output interface for reporting results of the image data comparisons performed by the comparator.

11. (amended) A monitoring system comprising:

a movably mounted digital camera adapted for receiving images of a space to be monitored for outputting digital image data;

an interpreter for receiving said digital image data from the digital camera;

a reference memory for storing reference image data for plural images and a comparator adapted for comparing

image data from the interpreter to image data for the plural images from the reference memory according to selected comparison criteria, wherein the interpreter and comparator cooperate to select recognizable portions of image data among unrecognized portions of image data in the space being monitored, the selected image portions being compared to the image data in the reference memory; and

an output interface for reporting results of the image data comparisons performed by the comparator.

21. (new) The monitoring system of claim 1, wherein said digital camera is adapted to receive images using a non-visible electromagnetic field.

22. (new) The monitoring system of claim 1, further comprising an additional camera for receiving images for outputting to said interpreter.

23. (new) The monitoring system of claim 22, wherein said additional camera is used with said digital camera such that the received images are three-dimensional images.

24. (new) The monitoring system of claim 1, wherein said digital camera is mounted on a vehicle and wherein said images include images of a license plate on an additional vehicle and wherein said images also include images of the additional vehicle, and further wherein said recognizable images include images for identifying alphanumeric characters on said license plate and also include images for identifying a type of said additional vehicle.

25. (new) The monitoring system of claim 11, wherein said digital camera is adapted to receive images using a non-visible electromagnetic field.

26. (new) The monitoring system of claim 11, further comprising an additional camera for receiving images for outputting to said interpreter.

27. (new) The monitoring system of claim 26, wherein said additional camera is used with said digital camera such that the received images are three-dimensional images.

28. (new) The monitoring system of claim 11, wherein said digital camera is mounted on a vehicle.

29. (new) The monitoring system of claim 11, wherein said digital camera is mounted on a vehicle and wherein said images include images of a license plate on an additional vehicle and wherein said images also include images of the additional vehicle, and further wherein said recognizable images include images for identifying alphanumeric characters on said license plate and also include images for identifying a type of said additional vehicle.

30. (new) A monitoring system comprising:

a movably mounted camera adapted for receiving images of a space to be monitored by detecting a non-visible electromagnetic field;

an interpreter for receiving image data from the camera;

a reference memory for storing reference image data;

a comparator connected for comparing image data from the interpreter to image data from the reference memory according to selected comparison criteria, wherein the interpreter and comparator cooperate to select recognizable portions of image data among unrecognized portions of image data in the space being monitored, the selected image portions being compared to the image data in the reference memory; and

an output interface for reporting results of the image data comparisons performed by the comparator.

31. (new) A system according to claim 30 further comprising a programmer for inputting the comparison criteria to the comparator.

32. (new) A system according to claim 31 wherein the programmer is connected for inputting analysis criteria to the interpreter and the interpreter is adapted for analyzing the image data according to the analysis criteria.

33. (new) A system according to claim 32 wherein the programmer is connected for inputting learn criteria to the interpreter and the interpreter is connected for storing image data from the camera in the reference memory according to the learn and analysis criteria.

34. (new) A system according to claim 31 wherein the programmer is connected for inputting learn criteria to the interpreter and the interpreter is connected for storing

image data from the camera in the reference memory according to the learn criteria.

35. (new) A system according to claim 31 wherein the programmer is connected for inputting utilization criteria, the output interface being adapted for reporting selected comparison results according the utilization criteria.

36. (new) A system according to claim 30 wherein the camera is mounted on a vehicle.

37. (new) A system according to claim 30 wherein the record memory is adapted for storing information associated with the image data stored.

38. (new) A system according to claim 30 wherein the interpreter selects images according to analysis criteria so that only the selected images are input to the comparator for comparison to reference images.

39. (new) A system according to claim 38 wherein the selected images represent only portions of a larger image.

40. (new) A system according to claim 30, wherein said camera is a digital camera, and wherein said image data is digital image data.

41. (new) The monitoring system of claim 30, further comprising an additional camera for receiving images for outputting to said interpreter.

42. (new) A system according to claim 30 wherein the non-visible electromagnetic field is infrared light.

43. (new) A system according to claim 30 wherein the non-visible electromagnetic field is a RADAR signal.

44. (new) A system according to claim 30 wherein the non-visible electromagnetic field is of a frequency less than visible light.

45. (new) A monitoring system comprising:

a movably mounted camera adapted for receiving images of a space to be monitored by detecting a non-visible electromagnetic field;

an interpreter for receiving image data from the camera;

a reference memory for storing reference image data for plural images and a comparator adapted for comparing image data from the interpreter to image data for the plural images from the reference memory according to selected comparison criteria, wherein the interpreter and comparator cooperate to select recognizable portions of image data among unrecognized portions of image data in the space being monitored, the selected image portions being compared to the image data in the reference memory; and

an output interface for reporting results of the image data comparisons performed by the comparator.

46. (new) A system according to claim 45 wherein the non-visible electromagnetic field is infrared light.

47. (new) A system according to claim 45 wherein the non-visible electromagnetic field is a RADAR signal.

48. (new) A system according to claim 45 wherein the non-visible electromagnetic field is of a frequency less than visible light.

49. (new) A monitoring system comprising:

a movably mounted camera adapted for receiving images of a space to be monitored;

an interpreter for receiving image data from the camera;

a reference memory for storing reference image data;

a comparator connected for comparing image data from the interpreter to image data from the reference memory according to selected comparison criteria, wherein the interpreter and comparator cooperate to select recognizable portions of image data among unrecognized portions of image data in the space being monitored, the selected image portions being compared to the image data in the reference memory to detect movement of an object; and

an output interface for reporting results of the image data comparisons performed by the comparator.

50. (new) A monitoring system comprising:

a movably mounted camera adapted for receiving images of a space to be monitored;

an interpreter for receiving image data from the camera;

a reference memory for storing reference image data;

a comparator connected for comparing image data from the interpreter to image data from the reference memory

according to selected comparison criteria, wherein the interpreter and comparator cooperate to select recognizable portions of image data among unrecognized portions of image data in the space being monitored, the selected image portions being compared to the image data in the reference memory to detect movement of an object; and

an output interface for reporting results of the image data comparisons performed by the comparator.

51. (new) A monitoring system comprising:

a first movably mounted camera adapted for receiving images of a space to be monitored;

a second camera adapted for receiving additional images of the space;

an interpreter for receiving image data from the first and second cameras;

a reference memory for storing reference image data;

a comparator connected for comparing image data from the interpreter to image data from the reference memory according to selected comparison criteria, wherein the interpreter and comparator cooperate to select recognizable portions of image data among unrecognized portions of image data in the space being monitored, the selected image portions being compared to the image data in the reference memory; and

an output interface for reporting results of the image data comparisons performed by the comparator.

52. (new) A monitoring system as in claim 51, wherein said image data represents three dimensional images.

53. (new) A monitoring system comprising:

a first movably mounted camera adapted for receiving images of a space to be monitored;

a second camera adapted for receiving additional images of the space;

an interpreter for receiving image data from the first and second cameras;

a reference memory for storing reference image data;

a comparator connected for comparing image data from the interpreter to image data from the reference memory according to selected comparison criteria, wherein the interpreter and comparator cooperate to select recognizable portions of image data among unrecognized portions of image data in the space being monitored, the selected image portions being compared to the image data in the reference memory; and

an output interface for reporting results of the image data comparisons performed by the comparator.

54. (new) A monitoring system as in claim 53, wherein said image data represents three dimensional images.

55. (new) A monitoring system comprising:

a movably mounted camera adapted for receiving images of a space to be monitored;

an interpreter for receiving image data from the camera;

a reference memory for storing reference image data;

a comparator connected for comparing image data from

the interpreter to image data from the reference memory according to selected comparison criteria, wherein the interpreter and comparator cooperate to select recognizable portions of image data among unrecognized portions of image data in the space being monitored, the selected image portions being compared to the image data in the reference memory by determining a correlation between pixels; and

an output interface for reporting results of the image data comparisons performed by the comparator.

56. (new) A monitoring system comprising:

a movably mounted camera adapted for receiving images of a space to be monitored;

an interpreter for receiving image data from the camera;

a reference memory for storing reference image data for plural images and a comparator adapted for comparing image data from the interpreter to image data for the plural images from the reference memory according to selected comparison criteria, wherein the interpreter and comparator cooperate to select recognizable portions of image data among unrecognized portions of image data in the space being monitored, the selected image portions being compared to the image data in the reference memory by determining a correlation between pixels; and

an output interface for reporting results of the image data comparisons performed by the comparator.

Status of Claims and Support for Claim Changes

Claims 2-10 and 12-20 have not been amended.

Claims 1 and 11 have been amended to recite that the camera is a digital camera, and that it is for outputting digital image data. This is supported at least by col. 3, lines 14-20 of the specification.

Claims 21-56 are newly added. Support citations for these new claims is provided below:

New dependent claims 21, 25, 42-44, and 46-48 recite features directed at a camera adapted to receive images using a non-visible electromagnetic field, with some of these claims reference to RADAR, infrared, and/or a frequency less than visible light. These features are at least supported by col. 3, lines 18-21, and col. 6, lines 10-19.

New dependent claims 22, 26, 41, recite the use of an additional camera, support for which is found at least in col. 3, lines 22-27.

New dependent claims 23, 27, 52 and 54 recite that an additional camera such that "received images are three-dimensional images", support for which is found at least in col. 3, lines 22-27.

New independent claim 51 incorporates all of the limitations of the original claim 1, and also recites a second camera adapted for receiving additional images of the space, support for which is found at least in col. 3, lines 22-27.

New independent claim 53 incorporates all of the limitations of the original claim 11, and also recites a second camera adapted for receiving additional images of the space, support for which is found at least in col. 3, lines 22-27.

New dependent claims 24 and 29 recite that the camera is mounted on a vehicle, and that the “images include images of a license plate on an additional vehicle and wherein said images also include images of the additional vehicle, and further wherein said recognizable images include images for identifying alphanumeric characters on said license plate and also include images for identifying a type of said additional vehicle”, support for which is found at col. 4, line 60 to col. 5, line 15 and col. 5, lines 44-50.

New dependent claims 28 and 36 recite that the camera is mounted on a vehicle, support for which is found at col. 4, line 60 to col. 5, line 15.

New claim 30, an independent claim incorporating all of the limitations of the original claim 1, recites a camera for “detecting a non-visible electromagnetic field”. These features are at least supported by col. 3, lines 18-21, and col. 6, lines 10-19.

Dependent claims 31-39 have the features of originals claim 2-10, respectively.

New claim 45, an independent claim incorporating all of the limitations of the original claim 11, recites a camera for “detecting a non-visible electromagnetic field”. These features are at least supported by col. 3, lines 18-21, and col. 6, lines 10-19.

New claim 49, an independent claim incorporating all of the limitations of the original claim 1, recites a comparison such that “the selected image portions being compared to the image data in the reference memory to detect movement of an object”. This is supported by at least col. 5, line 58 to col. 6, line 9.

New claim 50, an independent claim incorporating all of the limitations of the original claim 11, recites a comparison such that “the selected image portions being compared to the image data in the reference memory to detect movement

of an object". This is supported by at least col. 5, line 58 to col. 6, line 9.

New claim 55, an independent claim incorporating all of the limitations of the original claim 1, recites a comparison that determines a "correlation between pixels". This is supported by at least col. 35-45.

New claim 56, an independent claim incorporating all of the limitations of the original claim 11, also recites a comparison that determines a "correlation between pixels". This is supported by at least col. 35-45.

Prior or Concurrent Proceedings

The following list of lawsuits with current status are related to U.S. Pat. No. 5,831,669:

John Adrain v Genetec Inc., *et al.* Eastern District of Texas Case. No. 2:08-cv-423. Case closed.

John Adrain v Tannery Creek Systems, Inc. *et al.* Eastern District of Texas Case. No. 2:09-cv-326. Case closed (no current activity).

John Adrain v NDI Technologies, Inc. *et al.* Middle District of Florida Case No. 6:10-cv-1059. Case closed (no current activity).

John Adrain v Vigilant Video Inc., *et al.* Eastern District of Texas Case. No. 2:10-cv-173 – Action currently pending.

ARGUMENTS/REMARKS

Applicants would like to thank the examiners for the careful consideration given the present application, and for the personal interview conducted on July 27, 2011. The application has been carefully reviewed in light of the Office action and interview, and favorable reconsideration of the subject application is requested in view of the comments and amendments made herein.

Summary of Proceedings & Amendments

Claims 1-3 and 7-11 are subject to re-examination. Claims 4-6 and 12-20 are not subject to re-examination. Claims 1 and 11 are amended herein. New claims 21-56 are added without adding any new matter and without broadening the scope of the originally granted claims.

Claim Rejections

Claims 1-3 and 8-11 were rejected under 35 U.S.C. §102(b) as being anticipated by Netravali *et al.* (U.S. 4,611,347). Claim 7 was rejected under 35 U.S.C. §103(a) as being unpatentable over Netravali in view of Hwang (U.S. 5,425,108). For the following reasons, the rejection is respectfully traversed.

As discussed at the personal interview, claims 1 and 11 have been amended to recite that the camera is a digital camera, and that the camera outputs digital image data. In contrast, the Netravali camera clearly outputs analog image data, as an A/D converter 202 is provided at the output of the camera 203, as shown in Fig. 2, and discussed at col. 2, lines 65-68. Thus, Netravali fails to teach the use of a digital camera for outputting digital image data.

Furthermore, as also discussed, claims 1 and 11 recite a moveably mounted camera. Although the Examiner cites Netravali at col. 2 as teaching such a feature, a review of this section shows no such teaching found in the cited section, and after review of the entire reference, no such feature could be found.

Accordingly, for at least one or both of the above reasons, claims 1 and 11, and the claims dependent thereon, are patentable over Netravali.

Hwang does not overcome the shortcomings of Netravali because Hwang also teaches the use of a converter (in this case using a CPU) for converting an analog image into a digital image (see col. 3, lines 22-35 and claim 1). Thus, the cited claims, including claim 7, are patentable over the combination of Netravali with Hwang.

New Claims Analysis

Regarding the new independent claims, as also discussed at the personal interview, the features of these new claims are not discussed in the Netravali or Hwang references, as discussed below:

New claims 30 and 45 recite a camera adapted for “detecting a non-visible electromagnetic field”. Dependent claims 21, 25, 42-44, and 46-48, also recite similar features. These features are not found in Netravali or Hwang.

New claims 49 and 50 recite a comparator and interpreter such that “the selected image portions [are] compared to the image data in the reference memory to detect movement of an object”. These features are not found in Netravali or Hwang.

New claims 51 and 53 recite the use of both a first camera and a second camera for receiving images of a space, with the comparator and interpreter using these images for comparisons. These features are not found in Netravali or Hwang.

New claims 55 and 56 recite the feature of “selected image portions being compared to the image data in the reference memory by determining a correlation between pixels”. Netravali appears to extract simple features from an image to determine which subset of stored reference images to utilize. There is no discussion of doing this by comparing pixels, instead it looks at global and/or local features or attributes (see col. 3, lines 59-61). Hwang discusses an image recognition process, not pixel comparison (see Fig. 10). Thus, the cited features are not found in Netravali or Hwang.

The remaining new claims depend on one of the claims discussed above. Thus, all of these new claims are patentable over the Netravali and Hwang references for at least the reasons pointed out above.

In consideration of the foregoing analysis, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No. JBA-29520US1.

Respectfully submitted,

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